



Volume XI Issue 5 https://www.tis.army.mil Winter 2006

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The Deployer Mission Statement

The mission of The Deployer is to provide the community of Transportation Information Systems users, stakeholders and sponsors timely knowledge on our family of systems—systems that empower the DoD to plan, deploy, load, monitor and provide full visibility of the transportation process.

Message from the PM

appy 2006! I trust each of you had a safe and blessed holiday season. I want to update you on a number of issues that we have been working on over the past few months. One of the most exciting is in the area of training. We have completed the restructuring of our unit movement course from a single Joint User Course into two separate courses. (See Fall 2005 article, "TC AIMS II New Equipment Training to Change") The new courses will be debuting at Forts Hood, Bliss and Eustis this month. As always, we look forward to receiving your feedback on these courses so that we can continue to improve the quality of our training products.



Mr. Robert Morris, PM.TIS

Congress recently made a decision to cut a significant amount of our FY 06 funding that is used to support fielding, training, and equipment purchases. The result is that the fielding schedule this year will have to be drastically reduced and extended into the future. We have met with HQDA, FORSCOM, and the NGB to work a revised schedule. Please look for an update on our website.

Another issue of concern is the Block 3 development. The contractor is experiencing some integration problems with the product. What this means is that the individual components that make up Block 3 are progressing well, but the job of making them work together is more complex than originally expected. While this isn't an insurmountable problem, it has caused enough delay that requires us to reschedule the operational test planned for Fort Hood, Texas this month. The testing community requires six months to renegotiate the tasking of test players so at a minimum the test will move to this summer.

I am very happy to welcome a number of new members to the TIS family. Mr. Roy Brooks and Ms Evelyn Willis join the CSC team as the new Program Manager and Deputy Program Manager, respectively. Roy has a long association with TIS as a retired Army Transportation Corps Officer and more recently as a support contractor with the Office of the Assistant Deputy Under Secretary of Defense for Transportation Policy. On the government side we welcome Patrick Roche and Doug Thompson.

TC-AIMS MOBILITY TEAMS

by Thomas Nimmo, PEO EIS TIS (SRA)

he 1398th DSB (Deployment Support Brigade - Kuwait) answered the call to duty and sprung into action assisting the 3rd ID redeploy from Iraq. Their mission demonstrated the operational flexibility and reliability of TC-AIMS II from a standalone configuration while utilized by independent Mobile Teams. In a combat environment these teams, properly equipped and logistically supported, deployed north with a scheduled goal of processing one battalion per day.

THE MISSION

The 1398th Mobile Team mission was to support the redeployment of all 3rd ID equipment from IZ (Iraq). The intent was to push TC-AIMS II redeployment support and training as far north (Iraq) as possible to the war fighter. All teams were directed to be properly equipped and fully trained in order to ensure safe execution and successful accomplishment of the mission.

Each team consisting of four (4) Soldiers from the 1398th, two (2) Sailors from the U.S. Coast Guard Assistance and Inspection Detachment (RAID) and equipped with one (1) complete Mobile TC-AIMS II Kit, left from Kuwait and traveled between multiple FOBs (Forward Operation Bases) within IZ for approximately three weeks.

The intended execution was to provide the SPOD (Sea Port of Demarcation) with the earliest ITV (In-Transit Visibility) while ensuring 100% of 3rd ID equipment was captured on to TC-AIMS II and that the WPS files were sent to SPOD no later than ALD

(Available Load Date) -7 days. The success criteria were 100% of 3rd ID to be re-deployed on time and with no injuries to 1398th DSB personnel.

CONCEPT OF THE OPERATION

The concept of the operation was a three phased plan that began with training, preparation, the deployment of four TC-AIMS II Mobile Teams all operating within Iraq. Finally, termination with all 3rd ID equipment staged at the SPOD.

Phase I – Identify team members and move up to Camp Victory for deployment preparation to IZ.

Phase II – Fours teams arrive in IZ and support units of 3rd ID from multiple FOBs. This phase ends with the arrival of 3rd ID equipment to the RAA (Redeployment Assembly Area) at either KNB (Kuwait Naval Base) or over flow site Camp Arifjan, Kuwait.

Phase III – This Phase begins with the arrival of equipment to the wash rack at either KNB or Arifjan. WPS files are to be sent to SPOD.

Subordinate units in the rear were to be prepared to reinforce teams if necessary and to provide various reporting administration.

REQUIRED EQUIPMENT

The basic TC-AIMS II Mobile Kit required the following equipment:

- Stand alone TC-AIMS laptop with accessories
- Stand alone TIPS write laptop with accessories
- Interrogator with docking station and cables
- Zebra printer with cables
- Extra supply of label medium and ribbon
- Printer (HP 450) with cables and extra toner cartridges
- Power converter, extension cords, outlet adapters, surge protectors
- Memory sticks
- Utility Tools CD
- One mobile shipment trunk



TC-AIMS Mobility Teams, continued from page 2

The mission equipment baseline consisted of either TPW 1845 or DELL 810 laptops running Win2000 or XP Service Pack 2 respectively. The TC-AIMS II build was 3.02.001.06. There were zero TC-AIMS II specific breakdowns or data loss during the mission.

KST SUPPORT



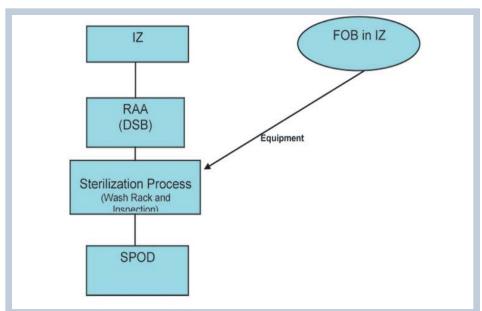
The current KST (Kuwait Support Team), Thomas Nimmo (SRA, Technical Support) and Walter Cary (LMR, Functional Support), actively involved themselves and supported the mission from beginning to end. Both advisors shared their respective specialty knowledge and were instrumental in facilitating the TC-AIMS II Mobile Teams with various mission oriented operational and contingency preparations.

The KST tested and configured all of the mission equipment. They provided several hours of informal functional review and individual team preparation. Then throughout the mission KST was available for 24/7 remote support with an average of 9-10 requests per week. Upon conclusion of the mission, Messrs Nimmo and Cary conducted debriefs and interviews to assist Command with interpreting a clear

representation of what was actually executed and further suggested improvements for subsequent follow-on missions. KST anticipated potential breakdowns and issued a Utility Tool CD to each team. The CD contained backup software plus, technical and functional information guides to assist teams with the most predictable contingencies.

REDEPLOYMENT MODELS

To better understand the TC-AIMS II Mobile Team mission, it will be important to become familiar with the inherent qualities and contrast of the redeployment models. The two models are: 1) the current Conventional RAA Model and 2) the alternative FOB Redeployment Model.



Conventional RAA Model

- Static organization.
- Receives deploying unit assets as they arrive to the RAA.
- Static TC-AIMS II server based system.
- · Controlled, safe environment
- Ability to better manage local DSB resources.

FOB Redeployment Model

- Fluid on-going missions within FOB
- Teams link up with deploying units. Unit assets are consolidated at FOB.
- Constant setup and tear down of stand alone TC-AIMS II system
- TOA (FOB Transfer of Authority)
- Mission driven team adaptability and efficiency.

The more conventional model is a static organization which allows for controlled processing of redeploying units. The model also allows the DSB to better manage its resources as units arrive in a safe rear echelon environment.

FOB REDEPLOYMENT BENEFITS

Deploying TC-AIMS Mobile Teams to the FOBs represents a valid financial, time and resource savings even though the unit movement is TPFDD (Time Phased Force and Deployment Data) driven. Since the redeploying unit is being processed at the FOB, they will save one unit equipment movement from the current three movements (see RAA/FOB Redeployment Model). In the current Conventional RAA Model, the unit equipment must move from 1) IZ to 2) RAA (data process, create MSLs and Marshalling Yard) to the 3) Sterilization (wash rack) and finally to the SPOD. This represents time and resources of added planning and additional upload and downloading of equipment from CULT (Common-user Land Transportation) assets.

The alternative FOB model allows the redeploying unit to bypass the movement to the RAA and directly begin the Sterilization Process and then proceed to the SPOD for embarkation. This is a net savings of one equipment movement.

OPERATIONAL CONSIDERATIONS

After debriefs and interviews, the KST recommends the following suggestions that may improve future TC-AIMS II Mobile Team missions and enhance results.

• Produce more seasoned TC-AIMS II operators.

Because of the fast pace of FOB operations, the mission demands seasoned TC-AIMS II operators that are fully trained to effectively troubleshoot and process unit data. Conduct additional TC-AIMS II refresher training.

Create relevant performance measurements and evaluation points.

Clear standards should be in place to more accurately assess success. Additionally, evaluation points will provide improved representation of the qualitative value of the FOB model.

• Verify and qualify the condition of the asset data.

More emphasis needs to be placed on data completion. The unit Command should verify and qualify their data prior to the TC-AIMS II Mobile Team arrival to the FOB. There were instances of units submitting data in Excel format, TC-ACCIS or without updates such as battle damage and lateral transfers. Unprepared data will only extend the FOB mission and diminish any benefits or projected return.

CONCLUSION

The 1398th and their attachments demonstrated agility and practical war fighting skills and thus earned distinction and pride from the U.S. Army and IZ redeploying units by successfully processing nearly an entire division on time and from a combat environment never completed on this scale.

In the final analysis, TC-AIMS II proved to be a reliable and versatile platform under dynamic and harsh conditions. The mobile standalone system was relatively simple to setup, maintain and tear down on a constant basis. The preparation and remote support from KST also proved to be valuable. Added value continues as subsequent missions are accepted with short turn around periods.

There is interest to better establish evaluation points in order to quantitatively compare the two redeployment models. It will also be interesting to evaluate an exercise establishing mobile TC-AIMS II Enterprise connectivity via mobile satellite communication which will improve self-sufficiency of the TC-AIMS II Mobile Teams.

2006 A NEW YEAR FOR TWO NEW TC-AIMS II TRAINING COURSES

by Mr. Ed Lukasek, SRA TC-AIMS II Instructor



SRA and LMR instructors review and study new training materials for the two new TCAIMS II UM1 and UM2 courses

C-AIMS II instructors converged on Ft Eustis Distance Learning Classrooms for the TC-AIMS II instructor recertification process for Unit Move I and Unit Move II Courses. The team consists of instructors from SRA International and several instructors from LMR Corp. This elite pool of instructors goes through a rigorous recertification process that spans several weeks of intense studying and reviewing the new instructional materials. Each of the instructors is highly qualified in the instruction of TCAIMS II and holds the title of "TCAIMS II Subject Matter Expert" once they complete the recertification process. "I am excited about teaching the two new TC-AIMS II courses in the enterprise environment," said Mike Britton, Lead for TCAIMS II Instructors. "We are teaching new technology that will clearly enhance unit move capabilities and efficiency. The new Unit Move 1 (UM1) course focuses on the Company and Battalion Unit Movement activities and allows trainers ample time to reinforce the UMO critical mission tasks. The new Unit Move 2 (UM2) course focuses attention on tasks performed by Intermediate command UMO's and higher echelon unit move personnel". A special thanks to the Fort Eustis Distance Learning Room Manager, Shadrick Dargan, for his support during the successful TCAIMS II recertification training process.

TIS PERFORMANCE ANALYSIS EFFORT

by Bob Clasen, Performance Engineer, and Shawn Davis, Test Engineer

hough software has made our lives easier in many ways, there are still times when a computer's sluggishness can cause frustrated users to ask, "Why is it taking so long to do this?" The performance of a computer system is a key part of its acceptance by users, and in recognition of this, the TIS Program Office has established a performance analysis team to assess the performance of applications such as AALPS and TC-AIMS II.

The team's goal is to quantify and objectively analyze the performance of TIS applications and to feed this information back to managers and developers for product improvement. They do this by measuring how long it takes to do key tasks, like importing V3 records or adding equipment records to a Unit Deployment List. By using scripts to repeat these tasks under various conditions (e.g., varying the number of records imported), response times can be measured that provide an indication of end-to-end system performance.

The performance analysis team is currently using WinRunner and LoadRunner to create these scripts and to collect the response time data for TIS applications in both standalone and enterprise modes. The tools accurately measure the time required to complete tasks from a user's perspective, and they enable the establishment of performance baselines which can be used to compare current system performance with that of the past.

Collecting and analyzing performance data has many benefits. It can identify performance bottlenecks and help diagnose the cause of performance problems. For example, possible sources of slow response times include inefficient application software, poorly configured enterprise servers, and network congestion. Performance analysis can also reduce infrastructure costs because applications that are not tuned for optimal performance typically require more system resources (hardware, network, etc.) than would be required otherwise. TIS can also use performance data for capacity planning activities, such as determining how many enterprise servers are required to support a given number of users.

The performance team will continue their ongoing efforts, and they plan to expand their capabilities in the near future. These plans include the collection of performance data at operational sites and comparing that with data currently being collected in the government test lab. They are also working to obtain new tools and licenses that will enable load testing of the enterprise servers. These activities will help optimize system performance and will allow users of TIS applications to spend their time more effectively.

TIS & FOREIGN MILITARY SALES By Charles Taylor, Business Directorate

he Foreign Military Sales (FMS) program is the government-togovernment method for sharing U.S. defense equipment, services, and training on a cost reimbursable basis. Responsible services and training sales further national security and foreign policy objectives by strengthening bilateral defense relations, supporting coalition building, and enhancing interoperability between U.S. forces and militaries of friends and allies. The Automated Air Load Planning Systems (AALPS) transitioned to PM, TIS in March 2003 and frequently participates in Foreign Military Sales. For a NATO country interested in obtaining AALPS, a Letter of Request is sent to the United States Army Security Assistance Command (USASAC) to establish a case. USASAC is the Army point of contact for NATO countries. Once a case is established, USASAC will contact PM, TIS for cost information related to the country's requirements. AALPS is currently in the UK and other countries such as Romania, Hungary, Lithuania, Bulgaria, Estonia and Belgium are interested in acquiring the software and training for this exceptional program.

TIS-TO IS THERE FOR YOU! By Robert White, Functional Analyst

s TCAIMS-II Block 3 development efforts continue to add theater operations functionality in TCAIMS-II, the Transportation Information Systems-Theater Operations (TIS-TO) remains critical to successfully accomplishing the planning, coordination and controlling of movements and transportation resources for 84 sites in USAREUR-BENELUX, Bosnia,

Germany, Hungry, Italy, Macedonia as well as for 22 sites in USFK. TIS-TO is comprised of four modules and one interface providing the prime functionality used to manage military movements in a Theater of Operations (TOPNS). The four modules are Theater Address System (TAS), Shipment Management Modular (SMM), Movement Control Team (MCT), and Mode Operations (MODE). The interface utilized by TIS-TO is to the Worldwide Port System (WPS).

System Capabilities: TIS-TO provides an automated information processing capability for planning, programming, coordinating, and controlling movements and transportation resources in a TOPNS. System functions support multiple sustainment missions in garrison and tactical environments with capabilities to facilitate rapid transition from peacetime to wartime operations. Transportation planners, movements managers, mode operators, and trans-shipper personnel use TIS-TO to provide a continuous, automated flow of accurate and concise transportation information throughout a TOPNS.

For more information on TIS-TO functionality and capabilities please visit our TIS website or contact the TIS Help Desk. \blacksquare

751G INTERMEC MOBILE COMPUTER

By James Wynn and Jose Gonzalez, AIT Functional Analysts

In the near future TCAIMS II will convert to a new handheld device, the 751G Intermec Mobile Computer. The 751G will be available under the AIT III contract as CLIN 0002A. Features include:

- Combines the power and speed of the Intel Xscale processor and the Microsoft Pocket PC Operating system
- Large, Reflective Thin Film Transistor (TFT) color display provides crisp, vivid screen contrast both indoors and out
- Highly configurable, allowing up to 3 wireless communication options in the same device



- Rugged, ergonomic design combines advanced battery power for full-day use
- Numeric and full alphanumeric keypad options

The 751G delivers mobile computing hardware that stands up to harsh conditions and the most rugged usage demands. It can withstand multiple drops to concrete and is sealed against rain and dust. Without trading off toughness for comfort, the ergonomic case design is sculpted and balanced for extended use.

TECHNICAL TIPS

TC-AIMS-II

WATER COMMODITY CODE CHANGES Announced By SDDC

n November 23, 2005, SDDC sent the following customer advisory. The most significant change for unit movement personnel is the elimination of water commodity codes 700 (General Cargo,NOS) and 500 (Subsistence,NOS). Our joint data library will be updated to reflect these changes; this will occur in the near term for Enterprise users and with the next fielded software upgrade for those operating in stand alone or client/server mode. Because the codes were eliminated to force users to more precisely identify items being shipped; there is no one for one replacement of these codes possible.

SDDC OPERATIONS CENTER CUSTOMER ADVISORY November 23, 2005 CA-05-12/14-BM008

Subject: Water Commodity Codes (WCC) change effective 01JAN06

Purpose: To advise all shipping activities, Carriers and Services of the WCC change

Be Advised: There have been some changes/deletions/additions to the Water Commodity

Codes. Please see below. These changes will become effective January 1, 2006.

The table depicting changes/deletions from the current WCC table can be found on the TIS

web/site at: https://www.tis.army.mil/Library/wcc%20changes.pdf

IMPACT OF WCC CHANGES ON TC-AIMS II USERS

By John Molter, TIS System Integration Engineer

DDC is saying that the WCC needs to be a specific description; 700 (General Cargo NOS (Not Otherwise Specified)) and 500 (Subsistence NOS) are codes with non-specific descriptions. IBS and WPS, to name two interfaces, will no longer accept files exported from TC-AIMS II with WCCs of 700 or 500. So the User will have to correct the offending records.

The basic records need to be corrected in Asset Management, Manage Equipment; however, depending on the Service deployment process, certain records may need to be edited in Movement Planning. What are the two types of records that we're dealing with? The first type is a prime record such as a vehicle, container, or pallet; the second type is a record the will be a child of a prime record (this doesn't apply to trailers that are Hitched). When creating a Container record (a prime record) in either Asset Management or Movement

Planning the WCC might be a code that identifies it as an Empty Container. When you put cargo into the container, then the container assumes the WCC of the cargo. The User must ensure that the cargo records have the appropriate WCC. In this case we are alerted to change any records that have a WCC of 700 or 500.

This will require some effort on the user's part to search through the WCC lookup table and select the code with the best description that matches the cargo.

These are some rules to go by in selecting the WCC for a stuffed container. If the container is stuffed with the same cargo, then the choice is easy; use the WCC of that cargo. If the container is stuffed with mixed cargo, then use the WCC that requires the greatest mission visibility or is greater than fifty-one percent or more by weight of a single NSN. If the container is stuffed with mixed cargo including a hazardous cargo, then the hazardous cargo WCC has precedence. (reference DTR Part II Appendix M http://www.transcom.mil/j5/pt/dtrpart2/dtr part ii app m.pdf)

IBS EXPORT INTERIM CUSTOMER SUPPORT SOLUTION

Alain Wampouille, Functional Analyst

ver the past few months many installations using TC-AIMS II or TC-ACCIS have experienced difficulties exporting interface files to the Integrated Booking System (IBS), SDDC. This is due to security changes to firewalls and routers along the routes. In order to mitigate

TECHNICAL TIPS

the immediate impact of these changes on our user base, TIS is providing our users with an interim customer support solution until TIS Messenger is implemented.

TIS requests that all users call the TIS Help Desk as soon as their IBS export files are ready to be transmitted from either TC-AIMS II or TC-ACCIS. If the originating system is TC-AIMS II, the UMC/ITO will need to email the IBS data file to the TIS Help Desk. If the originating system is TC-ACCIS, the TIS Help Desk staff will acquire the file directly from the TC-ACCIS server. The Help Desk will then use its secured FTP link to forward the export file to IBS.

The TIS Messenger is pending Information Systems Engineering Command (ISEC) concurrence and approval by the PEO EIS Designated Approval Authority (DAA) before implementation. For more information on the TIS Messenger, please refer to the Summer 2005 Deployer newsletter, page 8.

The following is the contact information for the TIS Help Desk:

Phone: (703) 752-0806 or 866-TC AIMS 2 (866-822-4672)

DSN: 221-5000

Email: tishelpdesk@eis.army.mil
Webpage: https://www.tis.army.mil/help.htm

AALPS

AALPS Installation Process Eric Gustafson, Functional Analyst

Our Help Desk has reported a current trend of installation errors from AALPS. This installation error reads:

"Failed to find administrator account: no mapping between account names and security ID"

This error is caused by installing AALPS on a computer that is named with a number or a special character. For example a note book computer within 189LG/LGX could be named 189LG00LGXCP438. The Air National Guard, in accordance with their Active Directory Naming Standards version 1.6 dated; 01 June 2005, currently requires all computers to have a name starting with a number. Based on this and other service or base requirements, a work-around has been developed. A permanent fix is currently in development and scheduled to be implemented in our next version.

The following steps will guide you through the installation or re-installation of AALPS on a computer that has a name starting with a number or special character:

NOTE: You must first obtain permission to remove the computer from the network domain, and permission to temporarily change the computer's name. During this process you will need the local computer administrator account password and the domain administrator account password (or access to people who know these passwords). **DO NOT PROCEED WITHOUT THE PROPER PASSWORDS AND PERMISSIONS**.

- A) Disconnect the computer from the network domain. (Unplug the network cable.)
- B) Rename the computer to a "legal" Sybase name
- 1. Log in to the local computer as the local administrator.
- 2. Right-click on My Computer and select Properties.
- 3. Click the Network Identification tab.
- 4. Click the Properties button.
- 5. WRITE DOWN THE CURRENT COMPUTER NAME!
- 6. Change the current computer name to a legal Sybase server name. If you are not sure what name to use, we suggest you use "aalps" (no quotes).
- 7. You will be directed to reboot the computer for the name change to take effect.
- C) Install or repair the installation of Sybase and AALPS.
- 1. Log in to the local computer as the local administrator.
- Follow the instructions provided in (a) the Support folder on the AALPS CD or (b) the SIP document in the SIP folder in the Documentation folder on TIS Suite CD #2 to install Sybase and AALPS.
- D) Check to see that AALPS works properly.
- 1. Select the Load Plan Editor module (Start/Programs/AALPS/LPE).
- 2. Log in as the user name aalpsuser with the password aalpsuser.
- 3. Select File/New/Deployment.
- 4. Enter test for the deployment name and click OK.

AALPS Installation Process, continued from page 8

TECHNICAL TIPS

- 5. Click the All AL tab; click the + next to C-130, and double-click STD-AL.
- 6. Click the 2500 lb pallet icon and click on the ramp of the C-130, then right-click to stop adding pallets.
- 7. Select Add/Item/ECF Item.
- 8. Type T61494 in the Find what: box and click Find.
- 9. Highlight any of the matching results and click Add, then Close.
- 10. Click somewhere on the aircraft schematic to load one truck, then right-click to stop adding trucks.
- 11. Close and save the load plan and the deployment, exit the LPE, and close the Login window.

E) Rename the computer (locally) back to the original name.

- 1. Log in to the local computer as the local administrator.
- 2. Right-click on My Computer and select Properties.
- 3. Click the Network Identification tab.
- 4. Click the Properties button.
- 5. Enter the original computer name (you wrote this down in A above). Select to Apply and save the new name.
- 6. You will be directed to reboot the computer for the name change to take effect.

F) Edit the sql.ini file so that it will find the proper computer name.

- 1. Using Windows Explorer, type %sybase% in the Address: field and press Enter.
- 2. Open the ini folder.
- 3. Copy the file sql.ini to sql_bak.ini.
- 4. Edit the file sql.ini.
- 5. Change each occurrence of the modified computer name in the master= and query= lines to the current computer name. DO NOT CHANGE any of the values contained inside square brackets [].
- 6. Save and close the file.
- 7. Shut down the computer.

G) Reconnect the computer to the network.

- 1. Reboot the computer.
- 2. Log in to the local computer as the local administrator.
- 3. Right-click on My Computer and select Properties.
- 4. Click the Network Identification tab.
- 5. Click the Properties button.
- 6. Enter the proper domain name and select OK.
- 7. You will be prompted for the user ID and password of the domain administrator.
- 8. You will be directed to reboot the computer for the change to take effect.

H) Check again to see that AALPS works properly.

- 1. Select the Load Plan Editor module (Start/Programs/AALPS/LPE).
- 2. Log in as the user name aalpsuser with the password aalpsuser.
- 3. Select File/Manage Loads.
- 4. Double-click on the deployment test.
- 5. Double-click on the aircraft listed in the top right window.
- 6. If this displays the same schematic you created earlier, AALPS is working properly.

TIS FAQS Ouestions from the Field



UNDERSTANDING SHIPPING CONFIGURATION

Collaboration of John Molter, TIS System Integration Engineer, and Carla Brown, TIS Functional Analyst

ur objective is to move unit equipment by Air and Sea to a Theater of Operation as needed. We will focus on shipping configuration, codes and the correct input to TC AIMS II. The reason we have shipping configurations is because we transport our equipment on a variety of conveyances, some large and some small. So, the issue is a matter of our equipment fitting in/on selected conveyances. TB 55-46-1, pages 3-2 through 3-4, describes the various shipping configurations, but our main concentration will be on Operational and Reduced. OPERATIONAL refers to equipment in its mission configuration with all component assemblies in place. REDUCED refers to equipment in its minimum configuration dimensionally.

Let's use some actual equipment with different shipping configurations and the corresponding dimensions that we may expect based on the explanation above.

Using the screenshot below (Figure 1) an M1977, Truck Transporter Bridge. The Item ID (also known as (aka) LIN, TAMCN, NEC, Tild or ti_id) of T91308 has 14 different LIN Indexes (aka Shipping or NSN Configurations, TidId or tid id).

Notice this Item ID has two different NSNs. The table has been organized and sorted to display the NSN sets and LIN Indexes. A LIN Index is a number that is associated in this table with a Shipping Configuration Code. Look at each row and notice the differences in dimensions.

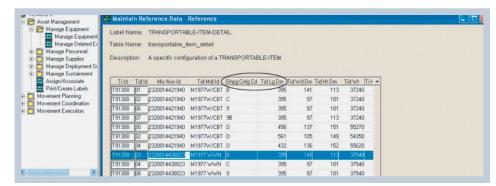


Figure 1

Users need to be careful about first selecting the correct Item ID and NSN match record. Next, the user needs to know for what conveyance will the actual equipment and the representative record in TC-AIMS II be prepared. The user should focus on the strategic leg — Air or Sea. Since the conveyance for the Sea leg will be a ship there will most likely be fewer dimension and weight restrictions; therefore, the Operational shipping configuration is commonly used in an active Theater. The conveyances for the Air leg vary in capacity significantly and therefore have more dimension and weight restrictions.

Our focus will be on the NSN set ending in 21940. The M1977 is called a Common Bridge Transporter (CBT), HEMTT variant. The CBT System also has a Bridge Adapter Pallet (BAP), an interior bridge bay, a ramp bridge bay, the improved boat cradle (IBC), and the bridge erection boat. (Reference MTMCTEA Ref 99-55-24).

EOUIPMENT TRANSPORTABILITY CRITERIA FOR AMC AIRCRAFT

Aircraft Type	Length (in.)	Width (in.)	Height (in.)	Max ACL (lbs.)
C-130	468	105	102	42,000
C-141	1090	111	103	68,725
C-17	784	204	142	170,900
C-5	1454	216	156	291,000

Reference TB 55-46-1 page 2-2.

Table 1

Understanding Shipping Configuration, continued from page 10

Comparing the records in the Transportable Item Detail (TID) table (Table 1) to the Transportability Criteria table we can determine what configuration of the M1977 will fit in which aircraft type. All configurations fit in the C-5, but as we compare the width, height, and weight restrictions for some of the aircraft types we eliminate our choices of shipping configurations that fit into a particular aircraft.

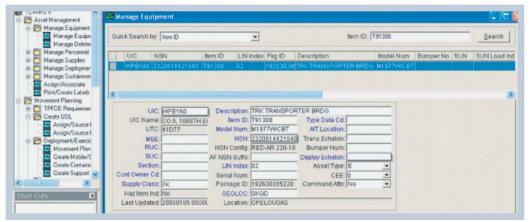


Figure 2

The screenshot above (Figure 2) displays the T91308 TRK TRANSPORTER BRDG record with a LIN Index of 02. Note the value of RED-AR 220-10 in the field labeled NSN Config; this is the Shipping Configuration. If I want to change the shipping configuration to that with dimensions of 456 X 137 X 1551 and weight of 55,270 then I simply place my cursor in the LIN Index field highlighting 02, replace it by typing 30, and click the Tab key. Doing this pulls the values from the Transportable Item Detail table for LIN Index of 30 and replaces the values previous associated with his record. The other method is to double-click in the LIN Index field which displays the supporting popup table, select Item Id in the Where field, enter T91308 in the What field, click the Find button, select the desired record with the Item ID, NSN, and NSN Configuration match, and click OK.

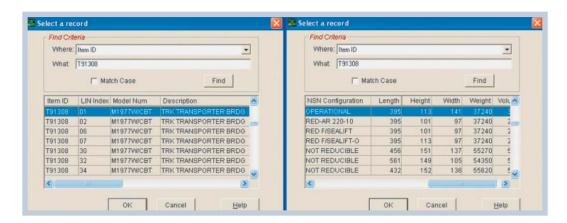


Figure 3

The screenshots above (Figure 3) are two different views of this lookup table place side-by-side. The first view is the default view; the second view is achieved by scrolling to the right using the horizontal scroll bar. If you compare these screenshots of the lookup tables to the first screenshot in this article Transportable Item Detail (TID) table you will notice the same type of information/data, with one exception. Our lookup table has a column name NSN Configuration with readable text values such as OPERATIONAL and RED-AR 220-

Understanding Shipping Configuration, continued from page 11

- 10. Transportable Item Detail (TID) table has a column named Shpg Cnfg Cd with values in it e.g. B and C. These codes mean nothing to the average user but they translate to OPERATIONAL and RED-AR 220-10.
- * Item ID is the name or label that we commonly used throughout the TC-AIMS II application to identify a particular item of equipment. Remember that supplies only have NSNs. This is a generic term that means the same thing for the Army LIN (Line Item Number, the Marine Corps TAMCN (Table of Authorized Material Control Number), and the Navy NEC (Navy Equipment Code). You may also see Item ID named as Tild or ti_id in many of the tables such as the TID table in the first screenshot of this article. The "ti" stands for transportable item which is the name of the database table that contains all of the Item IDs or ti_id's of each Service that have been provided to the JDL Administrator.
- ** LIN Index is a number representing a Shipping or NSN Configuration. Each Item ID will have a minimum of one LIN Index. Factors determining the need for additional LIN Indexes for an Item ID are different NSNs, different shipping configuration dimensions, or different configuration types, e.g. a single Item ID (an M1977) or a complete system (M1977 with Bay Bridge) as in LIN Index of 30 in the example used above. You may also see LIN Index named as TidId or tid_id in many of the tables such as the Transportable Item Detail (TID) table in the first screenshot of this article.

To assist you with better understanding Shipping Configurations; below are the most commonly used Shipping Configurations (See figures 4 and 2) and Shipping Configuration Codes (Shpg Cnfg Cd) used in TC AIMS II:

CONFIGURATION CODES

LIN Index	Shpg Cnfg Cd (NSN Configuration)	
01	B Operational	
02	C Red – AR 220-10	
06	9 Red F/Sealift	
07	9B Red F/Sealift – 0	
30, 32-34	D Not reducible	

OPERATIONAL

B – OPERATIONAL. THIS DESIGNATION APPLIES ONLY TO VEHICLES IN MISSION CONFIGURATION WITH ALL COMPONENT ASSEMBLIES IN PLACE. TB 55-46-1



Figure 4

M923 w/ Water Trailer Measuring an Operational Load

The Operational loading height is computed from the ground to the highest point of the vehicle and cargo compartment capacity is computed from the deck to the underside of the compartment.

REDUCED

C – Reduced. Vehicles reduced to minimum shipping dimensions within the unit's organic maintenance capability. This reflects removing the canvas tops, frames and bows; securing the antennas; folding the windshield and mirrors. TB 55-46-1



Figure 5

M35A2 w/M105 Trailer Measuring a Reduced Load

The Reduced loading height and cargo compartment capacity are computed, respectively, from the ground and compartment deck to the top of the side racks or top of the steering wheel (whichever is higher).

BEWARE OF CERTAIN SHIPPING CONFIGURATIONS By John Molter, TIS Systems Integration Engineer

es, this gives the user notice that there are some shipping configurations that, if selected, can create problems for you. This article will make you aware of two types and will explain the problems associated with them. The user really needs to know his equipment and the configurations associated with that equipment. The choice of shipping configuration does make a difference and here are some more reasons why it does.

When selecting an item from the Lookup table supporting the Item ID field we can find Where and What by Model Number as we have below for an M1070. The first view is the default view and the second view besides it was scrolled to the right to display the NSN Configuration of UNION (Figure 1).

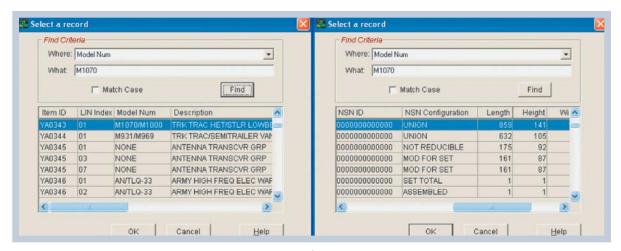
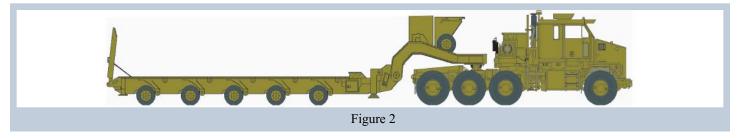


Figure 1

What we have in this highlighted row is more than just an M1070 TRUCK TRACTOR HET; it is also an M1000 STLR LOWBED 70-TON.



Beware of Certain Shipping Configurations, continued from page 13

When we click OK to populate the record and OK to save the record to our Organization Equipment List (OEL), as we have in the screenshot below, what are the implications of maintaining this record and using this record in Movement Planning and Movement Execution? Mostly, we have lost individual identity of at least one piece of equipment. It makes little practical sense to enter a Bumper Number or a Serial Number for two items when we use these fields to give a record a unique identity. The SUN that will be generated will be for one item, not two; this means that one TCN will be created when we are really shipping two separate items. Also, we will not be able to print Military Shipping Labels for the M1070 and the M1000 separately. This is why we create individual records for our prime records. Our prime records are vehicles, containers, or pallets.

We see in the Manage Equipment screen (Figure 3) below the highlighted record with the "UNION" NSN Configuration. Under it are two separate records, one for an M1070 and the other an M1000. As separate records we now have achieved individual identity and Bumper Number, Serial, Number, SUN, and TCN have real meaning.

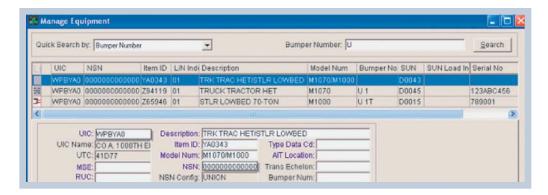


Figure 3

Also, more flexibility is achieved for conveyance load planning. These two records (Bumper Numbers U 1 and U 1T) have been Hitched. If we export a plan to AALPS, aircraft load planning tool, with these three records and attempt to load the items on C-17s, then we would not be able to load the UNION-ized record because we can not separate the M1070 and M1000. The M1070 and the M1000 that are separate records and are Hitched can be loaded on separate conveyances. The same is true with ICODES, the ship load planning tool.

Model Num/s	Shipping Configuration	Length	Width	Height	Weight
M1070/M1000	UNION	859	147	141	91399
M1070	OPERATIONAL	362	144	141	40999
M1000	OPERATIONAL	622	144	124	50400

Table 1

Aircraft Type	Length (in.)	Width (in.)	Height (in.)	Max ACL (lbs.)
C-130	468	105	102	42,000
C-141	1090	111	103	68,725
C-17	784	204	142	170,900
C-5	1454	216	156	291,000

Table 2: Equipment Transportability Criteria for AMC Aircraft - Reference TB 55-46-1 page 2-2.

There are other Item ID, NSN, and LIN Index choices where presumably like records could represent either one or more than one item of equipment. So the user has to know what he or she is selecting in a reference table. An example of this is Item ID T91308, TRK TRANSPORTER BRDG. The screenshots below (Figure 4) display the lookup table supporting the Item ID field in Asset Management, Manage Equipment. The right-hand view has been scrolled to the right to display the NSN Configurations and the dimensions and weight. What we see here are LIN Indexes 01, 02, 06, and 07 with their corresponding NSN Configurations. The LIN Indexes of 30, 32, and 34 all have the same NSN Configuration of NOT REDUCIBLE but have different dimensions and weights.

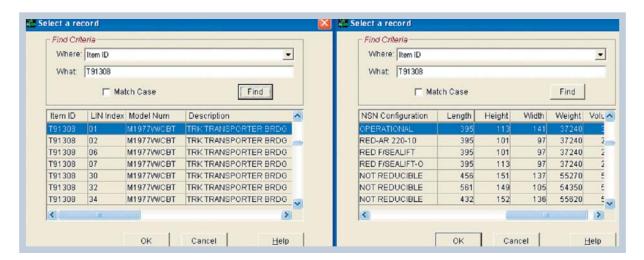


Figure 4

So what? 01, 02, 06, and 07 represent a single item of equipment, a T91308, TRK TRANSPORTER BRDG, Model M1977 in four different NSN or Shipping Configurations.



Figure 5

30 (Figure 5), 32, and 34 represent variations of a Common Bridge Transporter (CBT) System or multiple items of equipment as follows:

M1977 HEMTT Transporter, Bridge Adapter Pallet (BAP), Interior Bridge Bay (IB Bay), Ramp Bridge Bay (RB Bay), Improved Boat Cradle IBC), and Bridge Erection Boat.

LIN Index	Item 1	Item 2	Item 3
30	M1977	BAP	IB Bay
32	M1977	IBC	Boat
34	M1977	BAP	RB Bay

Table 3

As we can see in Table 3, each LIN Index is a different combination of equipment belonging to the CBT System and each represents three items of equipment. So the same issue that we identified with the NSN or Shipping Configuration of UNION also exists in this situation.

Actual Box and AUEL Waiver By TIS Functional Team

he key to these two fields is to ensure you know your cargo and that you have the correct dimensional data (Length, Width, Height, and Weight) prior to forwarding your data to your higher headquarters.

These two fields are similar, yet they serve completely different purposes. The Actual field is verification that you have entered the actual Length, Width, Height, and Weight of the piece of equipment. The AUEL (Automated Unit Equipment List) Waiver field is certification that you know that the piece of equipment no longer fits the dimensions of its "ORIGINAL" NSN/Shipping Configuration (Item ID/LIN Index).

The Actual field is located in Asset Management (Location: Manage Equipment, Physical Characteristics Tab) and it has a simple rule attached to it:

1. The box automatically defaults to "BLANK". You must check the box to "VERIFY" that the correct (actual) dimensional data is being submitted.

The AUEL Waiver field is located in Asset Management (Location: Manage Equipment, Other Characteristics Tab) and it has a few simple rules attached to it:

The box automatically defaults to "NO".
 There is no need to do anything to this box if you are shipping the item in its "ORIGINAL" NSN/Shipping Configuration (Item ID/LIN Index) or you have associated/linked additional cargo.

2. The user checks "YES" if he has changed any of the dimensional data of the piece of equipment. An example of this would be the user built a homemade communications shelter on the back of a HMMWV. This changes the height and weight of the vehicle without showing an association/link of additional cargo.

Note 1: Not checking "YES" will cause the cargo to be "FLAGGED" by your higher headquarters and rejected, possibly creating additional work for you.

Note 2: By checking the box "YES", the user is informing their higher headquarters that they have "INTENTIONALLY" changed the dimensional data of the NSN/Shipping Configuration (Item ID/LIN Index) that is reflected in TB-55-46-1. ■

TRANSITIONS

By Judith Avery, Systems Engineering Operations Manager

The TIS Family proudly welcomed Mr. Patrick Roche as the Chief of Engineering and Interoperability, a branch of the Technical Management Division (TMD), in October 2005. The Engineering and Interoperability Branch is responsible for ensuring that products are developed in accordance with sound software development practices, assuring that the designs are technically robust and cover all of the requirements. This branch is also responsible for maintaining the viability and currency of all interfaces with external systems.

Mr. Roche graduated from The Pennsylvania State University with a B.S. in Computer Science in 2001 and a Master's Degree in Manufacturing Management in 2002. Following graduation, Patrick spent two-and-a-half years at Naval Surface Warfare Center Dahlgren Division working for the Force Warfare Systems Department. Upon being selected to join the JPMO TIS, Mr. Roche relocated to his new residence in Alexandria, Virginia.

In his spare time, Patrick enjoys running, playing softball, and watching Penn State football (of course!). One of his favorite vacation activities is visiting major league baseball stadiums – he has already been to over half of the 30 parks situated around the country.

In the short time Patrick has been on staff, he has begun making contact with our current interface partners and assisting in the ongoing effort to address system changes as they arise. Additionally, he has begun developing top-level software business and operational requirements as well as spearheading the intranet initiative at TIS. Mr. Roche has already realized the accomplishment of one goal by finalizing the list of requirements for the subscription server. We look forward to seeing how Patrick's experience and fresh viewpoint will complement the team and wish him every success in his new position.



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Thank you for your cooperation.

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